TO RSC chair

BROOKHAVEN NATIONAL LABORATORY

lef. 3 Minites

MEMORANDUM

DATE:

Wednesday, March 13, 1991

TO:

D. Beavis

FROM:

SUBJECT:

R. Damm

LTB BEAM STOP REVIEW CLARIFICATION

The LTB beam stop is designed for a 5 KW average Linac beam power. The central section of the aluminum cylinder is calculated to reach ~ 350°F. The Linac, however, is capable of 18 KW beam power. At 18 KW, the beam stop (cylinder) will fail, reaching 1400°F in its central section. The stainless steel cooling jacket's welds will fail, exposing the cooling water to the machine vacuum.

The switches on the cooling system are used to monitor water temperature and flow. These switches are intended to protect the beam stop (device) and are not considered part of the personnel safety system.

LTB also contains a diagnostic low power beam stop. Its average power rating is 400 Watts. This device is not intended to be part of the personnel safety system.

mvh

copy to:

J. Brodowski

E. Rodger